

29,126/8/2

Holf-title working



HOFFMANN, Friedrich 1660-1742

A

TREATISE James OF THE Lynn

EXTRAORDINARY VIRTUES

AND

EFFECTS

OF

ASSES MILK,

In the CURE of various DISEASES,

Particularly the

GOUT, SCURVY, and NERVOUS
DISORDERS;

And of its peculiar nourishing and restorative Qualities in all Consumptive Disorders, and even the Decays of Old Age.

Illustrated with several remarkable Cases.

Translated from the LATIN of the celebrated FREDERICK HOFFMAN, M. D.

Principal Physician to his present Majesty the King of Prussia, and Member of the Royal Societies of London and Berlin.

LONDON:

Printed for John Whiston and Benjamin White, in Fleet-street. MDCCLIV.

(Price One Shilling.)



DIAM THO ASET

PREFACE.

Dr. Hoffman has deservedly acquired by his superior
abilities and long experience in his
profession, has made his writings
universally known and esteemed by
the learned.

This treatife being intended for general use, he has wrote with more plainness, and with as few terms of science as possible, to render it generally useful, as the subject he A 2 treats

treats of is proper for every one to be acquainted with, whose state of health hath required the use of this common and almost universal remedy.

We thought it would not be amis to prefix the opinions of those eminent physicians, Dr. Mosfett, Mr. Lemery, and Dr. Arbuthnot, on the same subject, which we have therefore here adjoined, all which confirm and strengthen the sentiments of Dr. Hosfman in this treatise.

DR. MOFFETT in his treatife of foods, says, "Asses milk is an especial cure for that fort of con"sumption,"

66 sumption, wherein the flesh decayeth through ulceration of the " lungs and breathing parts; it is " both meat and medicine, cleanfing and nourishing alike, not so "thin as to hinder expectoration, " nor so thick as to cause condensation of the matter putrified, but " being of a middle temper and " confistence, and consequently most " proper for that disease. A middle " age Ass's milk is the best. Hav-"ing got fuch a one, Thut her from " her foal four or five hours before " you use her milk, let her be well " curried, lest her skin, growing " foul, ill vapours be encreased in-" wardly, for want of perspiration. " Feed

" Feed her with grinded malt-straw " dried, mingled with a little sweet " fennel-seed, annis, or carraway-" feeds, which she will eat with "great pleasure, and digest into a " fweet and wholesome blood. An "hour after that milk her as near "the patient as you can, that it " may be drank before the air hath " alter'd it; for if it be once cold "it is not wholesome. This may " be done twice a day, morning and " evening, upon an empty stomach, " neither eating or drinking after it " for two hours: You may sweeten " it with fugar-candy, fugar of rofes, " or fine honey, and it will be " more effectual. In winter let her " be

be fed with the sweetest meadow hay."

MR. Lemery in his treatife on foods, fays, "Affes milk, as to its "confiftence and virtues, is much "like that of a woman; it is much "used as a remedy against the phthi-"fick and other disorders of the "lungs, and being like woman's "milk, is of a qualifying nature, "is beneficial in the cure of pim-"ples, the defluxions of the eyes, "and to ease the pains of the "gout."

DR. ARBUTHNOT in his treatise on aliments, page 85. observes, that woman's

(viii)

"woman's milk is the sweetest as
"to the nutritious quality, the next
"to it is that of Asses."

THE translator hopes he has rendered the author's sense very clear, and wishing it may prove of general good, recommends it to the perusal of the publick.

November 10,

TREATISE

OF THE.

Extraordinay Virtues and Effects of Asses Milk.

HOSE who have had a long and careful experience in the practice of physic, have a better opportunity than the rest of mankind of observing that the plainest sort forts of remedies, those which are most readily prepared, and as it were at hand in every family, are highly preferable to all kinds of compounds, and artificial mixtures of drugs whatsoever; not only in regard to the safety in using them, but likewise in their real virtue and efficacy; whether they be intended to thoroughly subdue, or put a timely stop to all the various kinds of diseases.

If we diligently revise the best writings of physicians in the earliest ages, we shall find that they met with greater fuccess, and wrought more cures with the most simple and easy medicines, such as are quite agreeable to nature, fuch as only require a regulation in diet, and have a greater share of nourishment than of physic in them, than the chemists of later times can effect with their inestimable secrets, and subtle compositions, produced by the force of fire. For all these, unless administered with the nicest care and discretion, instead of doing fervice, are fure to do much mischief; and therefore must be esteemed very dangerous, and far less eligible than those family remedies that may be used without any hazard at all.

Undoubtedly the refined art of chemistry, which brings to light the various mixtures and properties of natural substances, deserves a very great and peculiar degree of admiration; and the experiment is very surprising of the chemists, who are able to relieve the sufferings of their patients with a few drops only, or a very small pill: yet when

when the larger or more plentiful preparations of what are called Galenical medicines are rejected, when no regard is shewn to the safe affistance of regulated diets, so much recommended by the antients, and medicines altogether chemical, are almost universally used against all diseases; the effect is, that the practice of physic is become far more dangerous in our days, than it was formerly, and gets discredit by more frequent instances of the loss of patients. For my own part, I was always guided by the following rule; that the only way to gain a happy and fuccessful method in the healing art, is continually to unite theory with practice, the experience of the antients with that of the moderns, and Galenical and domestic remedies with chemical. For I have discovered by a long improved experience, that remedies which have blended in them the powers of both nourishment and physic, and are therefore pleasant and refreshing to the frame of our bodies, are not only the safest, but the most efficacious in the cure and prevention of diseases. And it is undeniable that the use and properest method of administring these, is more exactly to be learnt from the

B 2

remains

remains of the antients authors, than from the works of the moderns, or even of fuch of the moderns as have plainly a fondness and partiality for the antients.

ONE of the most eminent and distinguished instances of what I thus affert is Asses milk: which, indeed, was strenuously recommended by the antient physicians, and esteemed of sovereign benefit in rooting out the obstinate remains of the most grievous distempers; yet most of our later physicians, in other respects men of high repute, are very ignorant of its most excellent qualities, and therefore were either fo cautious, as feldom to introduce into their practice this defirable promoter of health, or actually were afraid to use it at all. In the following treatise therefore I intend, by fair and just arguments, founded on an extensive experience, to let forth all the admirable virtues of Affes milk, which have so long been absolutely forgotten and unknown.

Bur before we come immediately to the subject, it is not improper previously to shew in general, that all milk is a fort of

food

food that has a fingular medicinal virtue belonging to it, without confidering its remarkable nourishing quality; which very weighty reasons should recommend its being medicinally used. That milk has this nutritive quality, must I think be readily allowed by all, as it appears constantly to every man, by his own experience, to be particularly constituted and adapted to the support of our bodies. The unborn child, while yet inclosed in the womb, grows and is nourished by milk, which is prepared for it in the structure of the secundines. When it is born, it acquires still additional firmness from a supply of milk; is gradually wrought up to its perfect form; and all its inward parts gain so much more strength in proportion as they are able to alter and digest whatever food they take in, and reduce them to the milky juice called chyle. Lastly, every man, fo long as he remains alive, receives his whole nourishment and vigour from chyle, which is extracted from the food digested and dissolved, and is in truth no other than milk. It is milk that supplies the principles and materials, not of the blood alone,

alone, but of all the fluids that cherish and sustain life.

Since then milk is so manifestly proved to be the principal of all the kinds of aliment; so it may be deservedly reckoned the chief of all remedies. Which, though it may not seem clear and evident to others, may be proved to demonstration with very little difficulty. To begin then with experience, the best instructor in all things, and what is superior to all the most refined speculations.

No man, that has cultivated ever fo flight an acquaintance with the medicinal art, can be ignorant that the milk of almost all animals has a very powerful and marvellous efficacy in tempering, subduing, and diminishing the force of the strongest poisons, whether they come from the kingdom of minerals, animals, or plants, especially those of a corrosive kind, that are most remarkable for fatal execution. And so great is this efficacy, that any person, who has taken poison, by a seasonable use of milk in a proper method and quantity, will be sure to escape

cscape immediate death, and recover perfect health. On-which account it may be reafonably questioned, whether there be any more ready and prevalent antidote to be found in the whole works of nature. And the most antient and early writers in medicine both knew and described the certain virtue of milk against poisons. Diofscorides, the most ancient writer concerning the Materia Medica, fays, that milk, if fresh and new, is ferviceable against corrosions and inflammations occasioned by deadly poisons, fuch as cantharides, pityocampa, falamandra, or bupreste, orpiment, dorycnium, aconite, or ephemeron. And Pliny repeats almost the very fame account.

If we enquire into the treatment of difcases themselves, it will appear that milk was frequently and successfully employed against them, from numberless testimonies and examples to be found in many late authors, in common with those antient physicians Hippocrates, Galen, Celsus, and the Arabian writers. This will be more largely illustrated when we proceed to the subject of asses milk. At present let it suffice to produce produce what we read in Martian, " That "heretofore milk was esteemed the sacred " anchor and foundation of all remedies: fo "that there was scarce any distemper in "which milk was not made use of." The same is attested by Jo. Jac. Wepfer, an eminent author, and noble ornament of the faculty among the Dutch. "There is furely "fome divine quality belonging to milk. "Formerly I could not have believed it, " had I not had convincing experience of "it. Mine own eyes have feen men intirely " renewed by it. For by a discreet use of it, " multitudes have acquired a founder consti-"tution, more hale complexion, and greater " strength of body."

But though the milk that is generally used in the medicinal way, is that of the common domestick forts of animals, as cows, sheep, and goats; yet asses milk is by far the most efficacious, and its virtues in physic exceed those of every other species so much, that no fort of remedy is to be discovered so safe, and so powerful in its effects. For this, taken at seasonable times, in due quantities, and with a proper regimen, gives eminent relief

relief to fuch as are afflicted with phthifics, hectics, confumption and flow confuming fevers, chronical coughs, and a fcorbutic atrophy, hypochondriac and hyfteric diforders, cramps, ulcers in the bowels, and difeafes that proceed from a faline acrid erofion. This confideration induced me to fix upon this fort of milk, above all others, for the fubject of my observations, in order to fet forth its powers and properties, to demonstrate its usefulness, and confirm it by teftimonies and examples.

In the first place, we must assign the reafon why Asses milk is to be preferred in medicine, before that of other creatures. Which may be done in a more convincing and satisfactory manner, if we previously lay down some certain stated propositions, concerning the composition of milk, and those ingredients which are the foundation of all its operations. It is universally known that milk consists of three different substances, each of which has a different quality and powers peculiar to itself. The first is the sluid part, commonly called serum, or whey. The next is the oily fat part, which exhibits itself in cream

C

on the furface, and is to be wrought into butter. The third is of a coarfer nature, earthy and mucilaginous in its texture, and of this cheefe is formed. The ferum, or watry portion, exceeds the others in quantity, so that in different milks, there will be found eight or ten parts of this fluid, to one only of solid. The butter, or oily fat substance is the lightest, and the least in quantity, and inflammable in its nature. And lastly the curd is of a more fixed and heavy temper, is very readily hardened by acids, and subsides to the bottom in the substance of cheese.

THE efficacy of every fort of milk in curing and subduing any disease, is derived from this threefold nature of the ingredients that constitute the substance of milk. For that milk which is thin and liquid, and contains a larger proportion of serum, is preferable for its faculty of moistening, diluting, cleansing and relaxing. Again, that which is heavier, and has much of the gross substance of curd, is valuable for its excellence in hardening, confirming and consolidating the broken vessels.

Bur that which produces a great share of cream, and likewise a considerable quantity of the curd-like substance, is eminent for its foftening, smoothening, and nourishing quality. If we examine the different species of milks that are in common and daily use; the human is the sweetest of all, of a very foft and rich temperature, and is the best accommodated for the nutriment of the human body. That of cows is fatter, has more of the earthy and less of the watery substance, and is therefore less fitted for cleanfing the vessels, but best formed for softening, tempering and nourishing. Sheeps milk is the most gross,, and very full of the earthy mucilaginous curd; whence it has little of a cleanfing power, but is extremely useful for closing up such blood vessels, or lymphaticks, as are injur'd and corroded by acrid humours. Goats milk has very little ferum, and is of a pretty thick and aftringent consistence, produces very little butter, yet is more cleanfing and diluting than cows milk.

This different proportion in the ingredients of milk, and the difference of beneficial

effects arising therefrom, is not so much to be ascribed to the food of the animals, (of which more largely hereafter,) as to the different texture and conformation of their bodies. For tho' we were to feed the various milch-creatures with the same fort of food, for the same length of time, and in the same manner in all respects, yet would they not give milk of one and the same nature, but each of its own and peculiar kind. It is therefore a very evident truth, that the matter and quality of the food conduces but little towards the formation of milk, but that it is altogether brought to perfection by the peculiar nature of the animal, which confifts in a distinct compofition and texture of the fluids, (namely, the temperature of the blood and other juices,) and a particular make, structure, and constitution of the folids, especially of the glands belonging to the udder, which are composed of numberless fine vessels.

When we examine more minutely into the medicinal virtue and disposition of Asses milk, it will appear to be fraught with an abundance of peculiar excellencies which render it so exceedingly wholesome. In the first

first place, it is thinner than all other milks, and abounds with watery and ferous ingredients. This is what Aristotle and Galen have both observed, who call it λεωτομεζές ατον, composed of the minutest particles. Since then it is known that many diseases are caused by a groffness and tenacity of the juices, which, as they pass slowly thro' the finer vessels, of which the principal emunctories and strainers of the glands confist, are apt to stop in those narrow passages, to fill them up, and occasion obstructions, it is very obvious and natural to conclude, that the use of Asses milk, which abounds with ferous and fluid particles, must be extremely proper to open the obstructed vessels, to attenuate the gross and viscid juices, and set them in an easy and free motion. Again, when we know that multitudes of distempers proceed from an acrid, salt, and corrosive state of the sluids, we cannot but be affured that the thin ferum of Asses-milk will not fail of diluting, softening, and fubduing them: altho' it must be allowed at the same time, that the sweet oily substance contributes much toward this effect, which embraces and involves the pointed particles of salt, and by this means the crude, ill-diill-digested juices, being properly corrected, are, by the plentiful assistance of serum, convey'd in their due course thro' the vessels appointed for secretion.

IT is another extraordinary excellence of Asses milk, that it contains but a small proportion of the groffer curdling substance. Out of eight ounces of Asses milk which I set over hot coals in a broad vessel, after all the ferum was evaporated, I could scarce gather so much as six drachms of a whitish sweet matter. I then took twelve ounces of the fame milk, and fet it by to curdle in a close vessel, filled about half way. In three days time a very white and thin curd fettled at the bottom, which when separated from the whey by straining thro' filtrating paper, and afterwards dried, scarce amounted to two drachms; all the rest of its solid parts having in part passed with the whey thro' the Arainer, and partly adhered to the sides of the vessels, or lost themselves in the operation. On the contrary, the same weight of cows milk, treated in the fame manner, thickened into a groffer and heavier curd, which when clear'd from the whey, spread out out in a broad plate, and dried in the fun, weighed ten drachms. From these experiments it is evident, that the quantity of the gross curdling substance is very small in Asses milk, when compared with other forts. For this reason it easily diffuses itself into the minutest extremities of the blood-vessels, thoroughly dilutes the vital juices, liquifies the fluggish humours, and when it has thus disfolved them conveys them off. A third circumstance that more strongly evinces the salubrious quality of Affes milk, is, that the share of cheese-like substance which it contains is extremely foft and tender, and never makes a gross or firm curd. To make this evident, I warmed some Asses milk, and sprinkled it with vinegar, expecting to see it contract a thick confistence; but nothing appear'd of that fort, except a few light thin flakes floating here and there on the ferum: when, on the contrary, cow's milk, the instant it was mixed with an acid, condensed into lumps of a confiderable hardness, and fell to the bottom. Now in all cures which are fought by milk, nothing can be fo hurtful and dangerous as to have it curdle in the stomach, to prevent which accident ought to be the physicians principle care and concern. For the mischiefs occasioned by a coagulation of milk in the stomach are very pernicious, and have been observed and cautioned against by the best authors. It is past dispute therefore that that milk is the most wholsome and properest for medicinal uses, which has least tendency to curdle, which is the case with Asses milk in the most remarkable degree.

A fourth, and the most valuable excellence in Asses milk, is its exquisite sweetness, in which it exceeds all other species of milk, except the human: for you may extract from it by much the greatest quantity of delicate tasted sugar, or rather a thick substance resembling manna. To try the experiment, I boiled twelve ounces of Asses milk, in the month of July, over a gentle fire, and immediately it produced a thick concretion very fweet, weighing one ounce. Upon this I poured it into a glass with a pint of rain water, which when frequently shaken almost dissolved the mass, leaving only a small sediment. The liquor was then poured through filtrating paper, and fet to evaporate,

and

and vielded half an ounce of an honey-like substance, extremely sweet, and white. As Asses milk therefore contains so plentiful a proportion of fweet falts, we cannot doubt but it has for that reason a very singular medicinal quality which cannot be expected in other kinds of milk. For this honey-like falt greatly foftens, checks and moderates the acrimony of humours, whether acid or bilious, and by gently irritating the fibres of the bowels, urges them to their office and operation. Hippocrates very justly observes, that Asses milk disposes to purging more than any other. And in another place advises, as a remedy for the Fluor Albus, first to occasion a gentle purging by drinking Affes milk, and then to change it for cows milk.

From these enlarged observations which we have made on the excellencies of Asses milk, it must be evident to all that judge sensibly, that it has an admirable efficacy towards curing many distempers. It may now be proper to enumerate those distempers in regular order, and explain the use-fulness of this milk in each particular. The first and most remarkable instance we shall give,

give, by proving that no furer or more fuccessful remedy can be invented or recommended against consumptions. The use of milk in fuch diseases had long been practis'd, till the physical schools of Cnidos and Cos exploded it: at length Hippocrates, who came from the latter, vindicated and established its credit, and was univerfally followed in it by all the physicians of the next age. Galen says. a great deal in praise of milk in consumptive cases; and speaks of a place, called Stabia, very famous for its good air, pasture for cattle, and their wholsome milk, which was filled frequently with crouds of consumptive people that came thither for relief. And Aretæus ascribes so extraordinary virtues to milk in this grievous distemper, that he does not scruple to affirm, that if consumptive folks would drink great quantities of milk they would need no other remedy.

YET although milk of all kinds be a wholfome medicine in consumptive and decaying constitutions, yet Asses milk excells the others in a greater degree, because it fully answers every requisite that can conduce to the cure of consumptions. If we strictly enquire into the cause and origin of a consumption of the lungs, it will be found to proceed from a stoppage and obstruction of the vessels, of which the lungs are almost entirely composed. Whence Hippocrates very properly and ingeniously describes the rise of a consumption in these words; "when the lungs have col-" lected a quantity of blood, or falt phlegm, " and cannot discharge them, but they settle " and fix there, they occasion little pustules " to rise; which suppurate at first; and thro' "the whole distemper there continues 2 " sharp dry cough, chilliness, a fever, a pain " in the breast and back, and sometimes a " a strong wheesing both in lying down and "fitting up, and then the patient begins to " spit up much corrupted matter." - It was usual with the ancients to vary their prescriptions of milk for consumptions, and sometimes order Asses milk before, and sometimes after the use of other milk, as different occasions required. Hippocrates advises purging with Asses milk boiled (or Mares milk strained, which much resembles Asses milk) and drank every morning to the quantity of about a quart; after which he recommends cows milk, or goats.

D 2

PROSPER

PROSPER ALPINUS greatly recommends the use of woman's milk at first, then Affes, and lastly goats, in a consumption and ulceration of the lungs. For my part, I am convinced both from reason and experience, that Asses milk alone is sufficient for the cure of this terrible disease. For nothing can be fo properly adapted as this is, by its abundance of sweet detersive salts, to cleanse away and disperse the matter that obstructs the vessels and pipes of the lungs. Besides, it greatly restores decay'd strength, cools the heat of the intestines, fills out the wasted limbs, and preserves a free and open perspiration. Yet I'do not deny, but when the obstruction of the vessels in the lungs is cured, cows milk or goats, by reason of. their plenty of gross, earthy substance, may be proper to fill up and consolidate the cavities made by the corrofive ulcers.

If I may be allowed to produce my own experience, I could recount many instances of consumptive people, who were afflicted with an obstinate cough, a fever, a great discharge of viscid matter from the lungs, and

and an amazing wafte of the whole body; and who, after an ineffectual trial of other remedies, by my directions took to a long continued course of Asses milk, or cows milk, (either with or without some fort of tea,) and perfectly recovered. But omitting others, I shall only relate one very late case, which is now fresh in my memory: A man, about thirty years old, of a very debauched life, and given to all kinds of intemperance, especially drinking of spirituous liquors, first fell into a spitting of blood, which being cured, tho' after a long continuance, he contracted a fever, which at first had the appearance of a defluxion, but at length confumed his strength, and afflicted him night and day. He continually spit up a great discharge of purulent and viscid matter, his strength failed, and his flesh wasted so speedily, that he could not walk about, and was given over by every body. Yet, after he had laid three months in this fad condition, by God's bleffing he recovered, unexpectedly, at the return of the spring, on drinking goats milk warm every morning, after I had administered gentle, opening, saline-abstersive and nitrous

nitrous powders, to remove his obstructions, and hectic heat.

YET we must take notice, that tho' this be such a sovereign remedy for consumptions, and when given in a judicious manner, scarce ever fails of success, yet it will not cure every fort of consumption; but must be applied in the beginning of the distemper, and is most likely to take effect, before the ulcers be grown callous, or the corroded cavity be too deep and large, or the fever become continued and without intermission. Celsus justly advises, "If it be a real con-" fumption, you ought to attack it as early as possible; for when this distemper is of " long date, it is not eafily conquered. But " in the beginning, as in all lasting and obee stinate fevers, the use of milk is proper." And Alpinus very discreetly says, that a regular course of milk will cure consumptions in their beginning, before the ulcers be grown large and callous.

As a spitting of blood, difficulty of breathing, wasting of the flesh, and a small fever,

all

all generally inseparable companions of a consumption of the lungs, are occasioned by the same cause, namely, an obstruction of the vessels of the lungs, and pustules that arise from thence, which in the height of the distemper grow to a scirrhous and cancerous ulceration, there is no more powerful help against all these symptoms, than Asses milk, and it has always been recommended by the most antient and able physicians. There is a remarkable passage in Trallian, which fays, " If the whole body receives no be-" nefit from food, but begins apparently to waste away, and the breast does not dif-" charge much matter, they ought to live on milk only, and that of Asses excells " all others, because it purges to a pro-" per degree." The same author again commends Asses milk for a difficulty of breathing: "Such as are afflicted with a " difficulty of breathing, I have often "known relieved by Asses milk, when " given properly, for it clears and removes " whatever is fixed in the veffels of the " lungs." And in another place, speaking of spitting blood, he says, "All that spit 66 blood find relief from milk. For there "is no medicine or food of any kind fo fuited to their case as milk: and those that took to the use of that alone at first, and persevered in it for a long time, have all recovered their health. I knew a man that by living on milk for a whole year, and entirely abstaining from wine, was cured of a spitting of blood and matter, and escaped falling into a confumption."

A confumption with a flow feverish heat, is most times caused by a stoppage or obstruction in the smaller vessels, thence proceeds a stagnation of the humours, either in the lungs or bowels, and glandulous parts of the belly. Now Asses milk serves to moisten and remove these obstructions; it likewise cools and checks the violence of the feverish heat. Whence 'tis evident, that a right use of Asses milk is not only extremely serviceable, but the very best of all remedies in a flow fever. Hippocrates agrees with us in this, and advises those that have a consumption and small fever to drink milk. Riverius relates a remarkable case of a-young lady of Montpellier, aged 25, who had been long

long confined to her bed with a cough that harraffed her night and day, perpetual watching, a pain in her stomach, a slow fever, costiveness, and a general decay of the whole body, who was perfectly recovered by drinking Asses milk for one month, after being prepared for it by a laxative cooling julep.

To this let me add a most singular case that came within my observation a few years ago. A gentlewoman had for many years been subject to much sickness, but now for half a year together was afflicted with a flow fever, a loathing of food, languidness of the limbs, a dry cough, watchings, a great pain about the Os Sacrum, heat of urine, profuse sweats by night, and so entire a waste and decay in flesh and strength, that she was unable to stir from her bed. In vain had she been ply'd with decoctions, anti-hectic powders, stomachicks, anti-hysterics, resolvents, and a thousand other things; she lay past all hopes, and in expectation of certain death. At length, in the beginning of the spring, by my directions, she took to Asses milk, taking between whiles a little opening manna, mixed with with some cooling nitrous powders, and now and then some nourishing broths prepared with laxative roots, and with such happy success, that in three days only, every thing appeared wonderfully amended; and tho' the cure was not entirely compleated in many weeks, she was at last perfectly restored to her health and vigour.

I likewise judge Asses milk to be very efficacious against an Empyema, which is often caused by a pleuresy improperly treated, especially in bodies of a spongy habit, and shews itself by a constant and copious spitting of matter. To confirm which opinion I shall relate a remarkable case as told by T. Valleriola: A woman, after recovery from a pleurefy, began to discharge, by spitting, great quantities of purulent matter, which reduc'd her to a miserable, thin, emaciated, and lifeless condition. The author tried to relieve her breast of that load of filth by deterfive drinks, linctus's, broths, and fuch fort of things, but without fuccess: at length, as her fever was not very high, nor any obstruction appeared to be in the Hypochondria, or the bowels, he prescribed Affes

Asses milk fresh milked, and sweetened with a little fugar, which having drank for fix weeks, she recovered her health and a good constitution, and died twelve years after in child-bed. I likewise remember, many years fince, when I practis'd physic at Minden, a nobleman, thirty years of age, of a full and fanguine habit of body, who, after a pleurefy injudiciously treated, fell into fo very great a spitting both of purulent and chylous matter, which lasted more than a month; and that he fometimes spit more than a pint a day, and was thereby furprizingly weaken'd and emaciated. I ordered him to drink Asses milk, with powders of crabshells and bole armonic, balsam of sulphur of almonds, sperma ceti, and dragons blood mixt; when he had done this for two months, by the affistance of providence he was happily cured, to the admiration of all that knew him.

But yet, 'tis not only in these diseases which affect the lungs and other intestines with a cough, sever, waste and consumption, that Asses milk has this admirable and divine efficacy, but it is also wonderfully E 2 service.

ferviceable for foothing, abating, and lulling the fierceness of pains in the nervous parts of the body, chiefly those that fix themselves in the joints. These diseases, such as the gout in the hands, feet, and hips, are caused by a sharp, thin serum, issuing out of those glands which were discovered by Clopton Havers, nay through the coats of the glands, and falling on the articulo-nerveo-tendinous ligaments, which corrodes them and occafions most acute pains, cramps, and contractions of the limbs. This, in time, affects the whole system of the nerves, and brings on a fever, watching, anxiety, languidness, want of appetite, and universal restlessness, if the fit be very violent. In these rheumatic and gouty cases, the whole mass of humours is infected with foul, salt, tartarous, and sharp particles; which is perhaps owing to some antecedent cause, a fullness of blood, some suppression of a critical discharge from the blood, irregular living, or excess in eating; and yet some modern practitioners are apt to confound these remote causes with the proximate, the falt foulness of the humours, and prove themfelves quite ignorant of the nature of this distemper,

distemper, as well as of the method of applying remedies. For it's evident from experience, that all such remedies as sweeten the juices, correct the sharp salts, and as it were sheath-up their points, and at the same time gently promote each different kind of excretion, go a great way towards relieving the violence of the distemper, soften and mitigate the sharp pains, and in a great measure cure the disease itself, unless it be hereditary, or of a very long date.

Now milk, and particularly that of Affes, is by far the best and most excellent of this sort of remedies, excepting the diluting decoctions that are prepared from roots. Nor is its excellence any late discovery of the moderns, but the earliest writers in physic, and all their followers, highly recommended and approve it. Hippocrates advises, in a sciatica, first a purge, and then a course of Asses milk. And in the same treatise, he adds, it is proper in the gout first to soften the bowels with a glyster or suppository, and after a purge to drink warm whey or Asses milk. Pliny tells us many have been relieved from pains in the joints by drinking milk.

And

And Celfus fays, many people, by a long course of Asses milk, have been so thoroughly cleared of this distemper, as to be free from it ever after. Among the moderns, Gabriel Fonseca, Hollerius, Ballonius, Baglivi, Sydenham, Sachs, Griselius, Pechlinus, Dolæus, Waldschmidt, and many more, all agree, from numberless experiments and observations, in allowing milk, and especially Asses milk, to be the principal comfort and relief of gouty and rheumatic persons.

AND I can from my own knowledge affert, that after using gentle laxatives made of manna, solutive syrup of roses, and some abforbents mixed, I have found the drinking of goats milk, (where Asses could not be had) for many days together, without meat or drink of any other fort, has given great benefit; the pains have grown milder, and of shorter continuance, and all the other symptoms have ceased. I have known many gouty old men, who after drinking Asses milk with manna for the three first days, and then continuing it alone for a fortnight, have found their pains greatly abated: but when they laid aside this remedy, their torture was most intense

intense and obstinate, and confined them to their beds for some months. Yet this must all along be observed, that in these distempers the good effects of milk is more speedy and certain where the patient is young, the disease not inveterate, the gout not sixed to a particular part, nor transmitted by inheritance.

As Asses milk proves so very useful in relieving the pains that seize the outward parts of the Body, so it is likewise no less serviceable against those that affect the inward nervous parts, the stomach and intestines, as is the case in convulsive cholics. This very beneficial effect of it is to be accounted for in the following manner: The Asses milk, being diluting, corrects and overpowers the acrimony of the bilious juices, foftens and relaxes the contracted fibres with its ferous and slippery particles, and with its sweet ingredients renders the bowels laxative; then that corrofive matter which occasions all the pain, is readily conveyed off by stool, and all is easy and quiet. The truth of this Ballonius afferts, and although Hippocrates forbids the use of milk where there are bilious purgings,

yet, if there be no remarkable fever to corrupt the milk, I think it should be given. For if it may be thrown into the bowels by a glyster, without any hurtful effect, why not also into the stomach?

WHEN cramps and convulsions seize the nervous parts, which is the common symptom in hypochondriac and hysteric fits, I have always observed milk, especially that of Asses, do great good; provided there be no costiveness, nor obstruction in the bowels, and the first passages be not clogged with sharp and viscid phlegm. Hence Sydenham highly approves the use of milk in what he calls the hysteric cholic. "Many women, " fays he, for a long while troubled with "hysteric disorders, especially that which I " call hysteric cholic, have been quite cured by " only living on milk for fome time." Bened. Sylvaticus bestows the highest praises on Asses milk in hypochondriac complaints, which he directs to be sweetned with sugar, and made a moderate purge by a small mixture of powdered fenna, and drank for forty days together. And although Hippocrates forbids milk where the hypochondria are distended panded with wind, or the belly swoln and overcharged with blood, yet I have often learn'd from indisputable experience, that the hypochondria are not always thus oppressed, but that the stomach and adjoining intestines are often tortured with contractions caused by the sharpness of the humours, and blood that stagnates in the finer vessels, and that this disorder is successfully removed by milk.

For the same reason this judicious author zealously recommends Asses milk, in madness and hypochondriac melancholy, which are occasioned by spasms, that force too great a quantity of blood into the head, fo that it cannot circulate equally and freely thro' the vessels of the membranes that inclose the brain: and if it be drank every morning to the quantity of four or five ounces, for the space of a month, or longer, it corrects the acrid humours, eases the contractions of the fibres, cools and relaxes the bowels, and by gradually removing the cause, subdues that terrible disorder. But in order for F

for more certain success, it is proper to make an addition to the purging quality of the milk, by mixing a little manna; the happy effects of which I have very often experienced.

SINCE therefore it is so evident that Asses milk is beneficial to the nerves, and heals their feveral fore-mentioned diforders by means of its foftening and lubricating quality, we cannot doubt but it may be properly administered in other complaints, where the nervous parts are likewise afflicted and disordered with violent motions, as in epilepsies and convulfive fits. This is affirmed by that eminent author Sylvaticus, in many places; and I can attest the same with confidence. For I could produce very many examples of it, but one in particular of a youth of noble birth, about fourteen years of age, and of admirable parts and understanding. Having been struck by some fudden fright, he was instantly seized with strong convulsions in his limbs, chiefly his legs and arms: and after much anxiety and uneasiness of spirits, was oppressed with entire fwoonings,

fwoonings, fo that the fit came fometimes every other day, fometimes every day, about the evening, and purfuing him for the space of two months, reduced him to a very weak condition. Many physicians were consulted, who gave him various medicines, but without any effect: at last he was ordered to drink every morning about three ounces of Asses milk, now and then with a little manna, and to be put in a warm bath every other day, taking between whiles some anti-epileptic powders: in a month's time the disorder disappeared, and the patient, by the divine blessing, recovered his health and strength.

LET us consider those grievous disorders that attend the scurvy, such as a wasting of the slesh, sierce pains and contractions of the limbs, external ulcers and erosions. All which are derived from a total distemperature of the juices, a suppression of those very useful evacuations of sweat and excrement; from a a defect in the secretion of the bilious humours in the spleen; from a salt sulphureous foulness in the humours; and likewise from

their too thick consistence, which retards their natural progress, and obstructs the finer vessels. Now nothing can be so proper to open these closed passages, to remove obstructions, to correct the acrimony of the humours and to dissolve their viscidity, as diluting, moistening and cooling remedies, such as the whey of goats milk, or, what is still preferable to all, Asses milk.

THE strongest testimony I can produce in favour of this eminent good quality in milk, is that of the best author that ever wrote. upon the scurvy, Eugalenus, who says, "I " have seen many people recover out of the " scurvy from the use of milk and milk-diets, "with a stronger and better constitution than "those that have lived under the rules and " prescriptions of physicians." And he mentions several that have been cured of scorbutic fevers by milk, though contrary to the prescription of Hippocrates, in his aphorisms. And I myself could produce a multitude of examples within my own experience of people afflicted with a wandering scorbutic gout, (a national distemper in Westphalia) whom I absolutely

absolutely cured, when I practised physic at Minda, with no other medicine than Asses, or other sorts of milk, if it were not needless to tire the reader with so many illustrations of a thing that is so clear and evident.

WHEN scorbutic people and old men, who are naturally subject to a salt and foul corruption of the humours, and likewise fuch as are infected with a venereal taint, are afflicted with dangerous ulcers that seem to resemble cancers; even in these terrible fymptoms a very speedy and sure relief may be had from Asses milk, and the whey of it. Which, as it is evident from all the above-mentioned arguments, is likewise confirmed by the authorities of many authors both antient and modern. Dioscorides recommends milk, mixed with honey, or falt, in all forts of ulcerations in general, as well inward as outward, for violent itching in the skin, pimples, and foul humours of the body. Galen advises the use of Asses milk for ulcers in the uterus, the reins, the bladder, and pudenda. To these we may add the

the affertion of Sylvaticus, that Asses milk drank for thirty or forty days together, not only entirely cured a cancerous swelling in the neck of the uterus, but also a venereal ulcer, attended with a confumption and flow fever. Again, the same author commends the same remedy for the cure of that herculean distemper, the elephantiasis, in these words; "Asses milk drank every morning "to the quantity of a quart, with a little " fugar, and cream of tartar, to render it " purgative, is a very excellent remedy for "the elephantiafis." And Ambrose Parey, in his book of furgery, fays, he has known by experience the admirable efficacy of Asses milk, in cancerous ulcers, both taken inwardly, and applied outwardly in fomentations.

And while we are enumerating the many noble virtues of Asses milk, we must not omit its peculiar excellence not only as a remedy to the distempers of old men, but as a sort of food of great essicacy in restoring their decayed strength. With regard to its medicinal excellence in relieving old age, we have

have elsewhere shewn at large, that in an advanced age, the blood and all the juices contract a great degree of foulness and corruption, from obstructions in the excretory glands and vessels, whence in time proceeds variety of distempers, the most remarkable of which are indigestion, languidness in the limbs, confumption of the folids, a low fever, and pruritus. And all these are to be relieved by a proper use of milk. And on this account it has always been held in great esteem both by the ancients and moderns; for it is very efficacious in rendering the humours-fluid when they are too thick, in diluting those that are falt and acrid, in relaxing the too rigid and tense fibres, and in restoring the excretions, when disturbed, to their proper order, as it not only cleanses the foul juices, but likewise breeds a proper supply of good ones. It will be sufficient for the present purpose to produce the authority of Trallian, who strongly recommends Asses milk to old people who are under a confumptive wasting; and the reason he gives for it is, because they have but a small-share of strength, and are neither able to separate nourishnourishment from common food, nor to distribute it thro' the constitution; wherefore the milk of women is first to be prefer'd, and next to it that of Asses.

IF we enquire into the nourishing and analeptic property of Asses milk, by which it retards the decays of old age, and restores the strength of those who have been reduced by distempers, no body can hesitate to give the preference to this kind of milk above any others.

Bur it may not perhaps be disagreeable, or improper, to produce the authority of authors of great credit, who have treated of this subject. I shall begin with the recommendation that Helmont gives of it; who, altho' in other parts of his writings he condemns the use of milk, yet in Libr. de Digest. Aliment. ascribes a particularly refreshing invigorating and nourishing property to that of Asses, supposing that the Ass, as a long-liv'd animal, is furnish'd with milk preferable to any others. Eryphon, as Herodotus relates, relied altogether on Asses milk for restoring old and emaciated people. I myself also knew an officer of the army, who was restored to his former health and ease by Asses milk, tho' he was almost entirely wasted away with the venereal distemper and excruciating pains that had assisted him for several years. Heurnius also relates, that Asses milk prevents old age and wrinkles; for which reason, no doubt, it was that Poppea, the wife of Nero, always ordered a hundred Asses to be kept, that she might bathe every day in their milk, to preserve her skin white, soft, and smooth.

HAVING now explained the property of Asses milk, and its excellence in several disorders, I shall proceed to the proper method of giving it, and then shew what is necessary to be observed in order to expect success from it. But it will first be proper to say somewhat of the animal itself. A milch Ass ought to be quite free from any disorder, not very old, but of a middle age, neither too sat nor too lean, and may be esteemed the better if she bring her soal in the month of May. She ought not to be

fed in a house, but kept in meadows which produce plenty of medicinal herbs; she should drink river water, which, as it is lighter and more diluting than spring water, passes off quicker by the proper discharges, and mixing more thoroughly with the humours, cleanses them more effectually. Helmont has an ingenious remark on this subject: he advises that the Ass should be combed or curried every morning as horses are, for that it may eafily be known from the milk, whether she has been dressed that morning or not. Without doubt there may be some reason for this, because the use of the currycomb increases perspiration, and cleanses the humours, by paffing off a great many faline particles that way.

As is fed with, because the nature and properties of the milk of animals is alter'd by their diet, so as to be more or less wholesome, or even adapted to some particular disorders. For as it is a common practice to make a purging or alterative medicine given to the nurse, communicate its properperties

perties to her milk and take effect on the child, so no doubt the same will hold good in regard to the animals whose milk we use. Galen proves this by the instance of goats, who are fed with scammony or spurge, whose milk is purging. Dioscorides and Hippocrates are of the same opinion, and in the Acta Haffniensia it is afferted, that wormwood eaten in large quantities makes the milk bitter. From hence it is that Cælius Aurelianus commends milk in the cœliac passion, or flux, which is taken from goats that feed on willows, vine leaves, oaks, or fallows, plaintain, and plants of the same nature; giving this reason for it, "because the astringent quality of the herbs com-" municates itself to the milk." But there is a remarkable difference between the milk which is produced in spring from green pasture, and that in winter from dry food. Varro, who was very well acquainted with what belong to country affairs, was of this opinion, and fays, "that milk from barley " and stubble, and all kinds of hard and dry "food is nourishing; but that is more cleans-" ing which comes from green pasture." And G 2 .Dioscorides

Dioscorides thinks that milk in spring is thinner, and because it comes from green pasture, more laxative and softening.

FROM whence it plainly appears, that milk of all forts, but more especially Asses, is not only most serviceable in the spring, but that its virtues may, by a regulation of food, be so prepared, as to be particularly effective against any one distemper. Wherefore I should advise that a milch Ass be fed with fuch herbs as in themselves are known proper for the disease you would relieve. In a confumption, and diseases of the lungs and breast, let her be supplied with veronica, ground ivy, the blind or dead nettle, colts-foot, scurvy-grass; or, if you want to restore the vigour of the solids, with fanicula, tansey, nummularia, consolidamajor, flowers of St. John's-wort, alchimilla, polygonum, and the like; or let the " creature be drove to places where these plants abound. In pains and spasms, both inward and external, it may be useful to mix in her food yarrow, chamomile flowers, acacia, mead-wort, tilia, melilot, spurge, mallows,

mallows, marsh mallows, and others of this nature. In flow and hectic fevers, (besides those we named as good for the lungs) we may add plantane, prunella, and fcurvygrass mix'd with germander. If the hypochondria are obstructed, and cause a scorbutic foulness in the juices, choose out some herbs of the opening or laxative kind; fuch are fumitory, the leffer centaury, abfinthium, scurvy-grass, trefoil, water-cress, nasturtium, and the lesser house-leek. In the same manner may milk be rendered medicinal, and fit for almost any complaints, by administring such herbs and flowers as the physician shall esteem most proper and effectual.

As to the method of using it, these following rules may be observed.

I. In cases of necessity, Asses milk may be drank at all times; but it is by far the most serviceable in the spring and summer, when all the herbs are full of juices, and greatly enrich the milk. 2. The milk should be milked into a pail set over hot water, and imme-

immediately put into a vessel that has a narrow mouth, and shut's close, and so drank directly while it is warm; for milk, like all other liquors, has a fubtle spirit, of a strengthening and invigorating quality, which by no means ought to be allowed to fly off with its warmth. Hence Galen orders that milk be drank instantly, and the animal brought to the patient's bed-side; for that its nature, like that of the femen, is at once altered by the open air. 3. The morning is the best time of day to drink, as it will operate the easier in an empty stomach; and therefore no other food ought to be taken in four or five hours after it. Yet, if circumstances require a frequent repetition of it, it may be drank in the afternoon; but it should be about four hours after dinner has been digested, and in but half the quantity that is drank in the morning, 4. 'Tis impossible to prescribe in general any fix'd quantity that should be used, because of the difference of ages, constitutions, and distempers; but thus far may be faid, that you ought never to exceed the quantity of three common pints. 5. The time of continuing it must be directed

rected by the degree and strength of the distemper: if that be very obstinate, it were well to continue drinking it for three months, or longer; especially if a favourable prospect appears of success, and the violence of the symptoms abate very discernably.

YET a prudent and experienced physician will so order, regulate, and methodise the use of this medicine, as almost to insure success, and avoid any hurtful consequences. I shall therefore conclude with a few cautions that should be observed very accurately.

1. Before a course of milk is begun, the state and condition of the stomach must be carefully inquired into: Whether it will bear milk, and have a sufficient degree of strength to concoct, digest, and then discharge it. For if that be weak and infirm, if it be troubled with wind and phlegm, or be loaded with a croud of acid humours, milk must not be taken; because, until these things are remedied, that will curdle and stagnate, and corrupt, and increase the flatulence and uneasiness. It will be proper therefore to cleanse

cleanse and relieve the stomach first, either downwards, by a gentle dose of manna, or, where the case will allow, by a vomit with a grain or two of emetic tartar. 2. Great care must be had that the milk be not turned to curd. And therefore where the food is apt to grow acid in the stomach, as is the case with old and hypochondriac people, it. is adviseable to give absorbent, earthy, and alcaline medicines, mix'd with the milk, adding likewise some stomachic carminative essence, or volatile oily salt. 3. When the patient has drank milk for fix or eight days, a gentle dose of manna should be given, to purge the bowels, and carry off whatever foulness the stomach may have contracted, that the farther efficacy of the milk be not retarded. 4. It is best to drink it at first sparingly, three or four ounces, and then to increase the draught gradually, that the stomach be not too fuddenly oppressed, and conceive a dislike and loathing to the remedy. 5. A proper regulation of diet must be observed during the course of milk. The lightness of food must be chiefly consulted; avoiding not only meats hard of digestion, but alfo

also those that are reckoned to afford little nourishment, and likewise all flatulent victuals, summer fruits, and acids of all kinds; abstaining from all malt liquors, and wines, except a small quantity of the soundest Spanish wines. Nor should any bread be used that is lumpish and fermented, but what is made of the cleanest and finest wheat flour.

In the last place let me add some instances, wherein the use of milk may be judged improper. In head-aches arifing from crudities in the stomach, in very acute fevers, and when the bowels are overcharged. with gross blood, milk is very pernicious: being no less improper when the Stomach is cold and filled with acids, than when in a heat and ferment, as it is in fevers, and when the bilious humours abound, because in both cases it quickly turns to a foul and offensive putrid state. Milk is also very prejudicial to those who, either through neglect of bleeding, or a total suppression of the difcharge of the piles, or the menses, are afflicted with a too great and unnatural share of blood

blood, and consequently with a soulness of the humours. Which agrees entirely with the observation of Hippocrates, That the more you nourish distempered bodies, the more you injure them. For unless the excess of blood be reduced by moderate bleeding, and the faulty digestion amended by medicines that correct the whole mass of sluids, all sorts of milk must be avoided, as extremely hurtful and dangerous.

F I N I S.

In ONE VOLUME, OCTAVO,

The SECOND EDITION, beautifully printed, of IPPOCRATES upon AIR, WATER, and SITUATION; upon Epidemical Difeases; and upon Prognostics, in Acute Cases of pecially.

To which is added,

The Life of Hippocrates from Soranus, and Thucydides's Account of the Plague of Athens. The Whole translated, methodised, and illustrated with useful and explanatory Notes.

By F. A. N. C. I. S. C. L. I. F. T. O. N., M. D. Fellow of the College of Physicians, and of the Royal Society.

Printed for J. Whiston and B. White, at Mr. Boyle's Head in Fleet-street.







